

Laboratory System Improvement Program Assessment Report

Webinar - March 30, 2011

City of Milwaukee

Public Health Laboratory



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Today's Agenda

- Provide an overview of the Laboratory System Improvement Program (LSIP)
- Highlight Milwaukee's LSIP assessment results
- Outline next steps
- Discuss system improvement priorities & answer questions

LSIP - Home Page



Laboratory System Improvement

Program (L-SIP)

Home

Introduction

Assessment

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Greetings!

Welcome to the City of Milwaukee Health Department's web site dedicated to the [Laboratory System Improvement Program \(L-SIP\)](#) . The purpose of this site is to support our collective efforts to assess the performance of the Local Public Health Laboratory (LPHL) System in Milwaukee. The web site will also fulfill an ongoing role by providing a platform for communication about system improvement efforts that will follow the assessment.

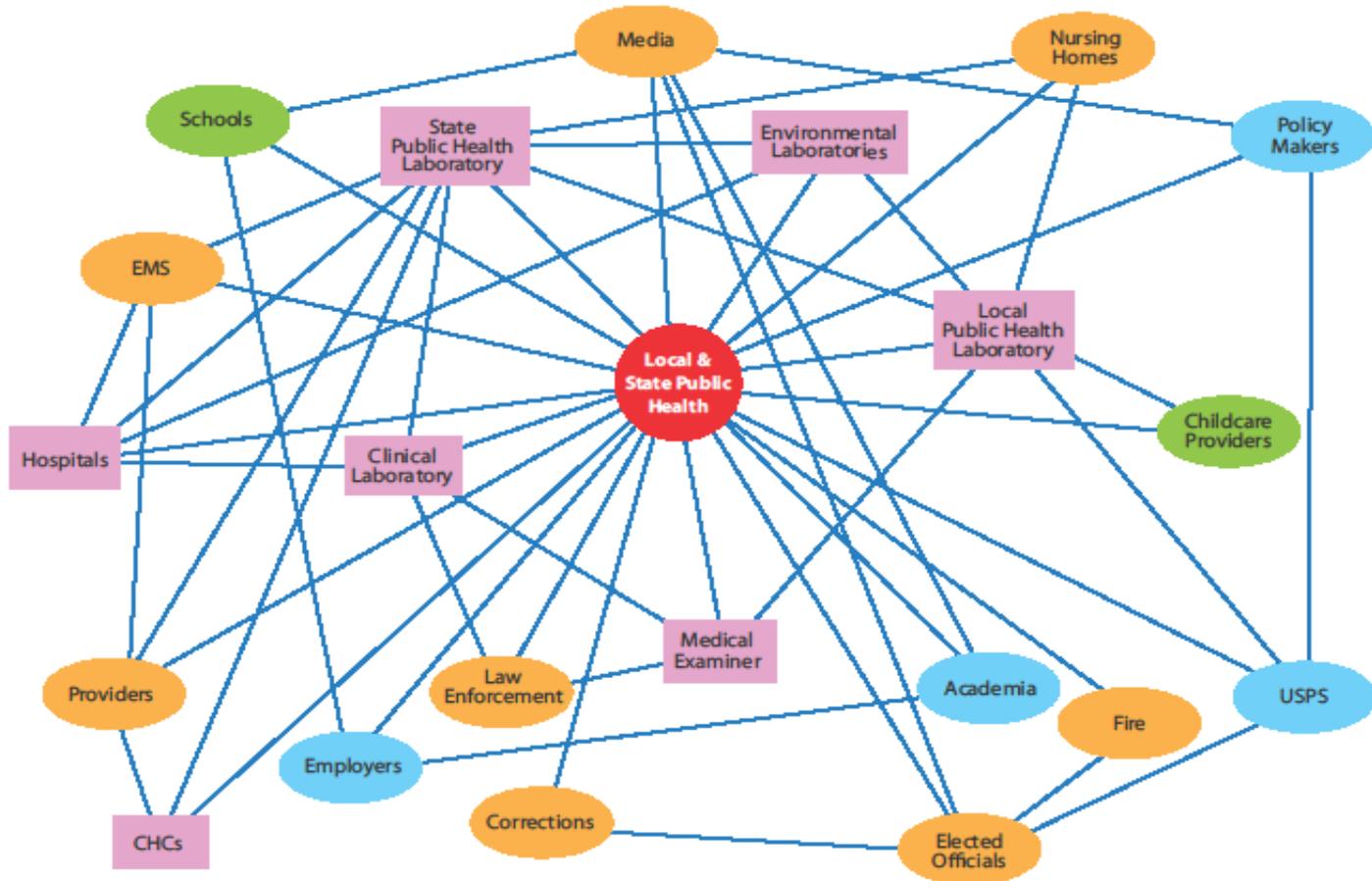
Laboratory System Improvement Program (LSIP)

The purpose of the LSIP is to improve the quality of public health laboratory practice and performance.

What is the Laboratory System?

- The Local Public Health Laboratory (LPHL) system consists of all the organizations that participate in or otherwise support public health laboratory testing.
- The LPHL system includes those who initiate testing and those who ultimately use the test results.
- More than the local public health laboratory
 - ✓ All public, private, and voluntary entities that contribute to public health laboratory practice in the community
 - ✓ A network of entities with differing roles, missions, relationships, and interactions

Local Public Health Laboratory System



2010 City of Milwaukee Health Department

MILWAUKEE PUBLIC HEALTH LABORATORY: CONNECTIONS TO PREPAREDNESS



Laboratory System Improvement Program Overview

- Focuses on the capacity of the public health laboratory *system*
- Designed around the ten Essential Public Health Services
- Standards describe the optimal level of performance
- Assessment provides the basis for system improvement efforts

LSIP Benefits

- Improves communication and collaboration among system partners
- Educates participants about the public health laboratory system and the interconnectedness of stakeholder activities
- Strengthens the diverse network of partners
- Identifies system strengths and weaknesses as a basis for quality improvement efforts
- Identifies and secures resources needed to improve the Local Public Health Laboratory (LPHL) system

Milwaukee LSIP

- November 18, 2010
- 73 public health laboratory system stakeholders
- 40 agencies
- First time a locality implemented LSIP on a municipal/regional level

Registration



Opening Remarks





Ten Essential Public Health Services

Laboratory performance measurements were designed around the ten Essential Public Health Services developed nationally in 1996. They represent the capacities that must be present in a public health system, whether at the local, state or national level, to assure a fully functioning system. They include:

1. Monitor health status to identify community health problems
2. Diagnose and investigate health problems and health hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health and personal health care workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems

Measurement Tool

- Essential Service
 - Intent
 - Indicators
 - Model Standard
 - Key Ideas
 - Discussion Points

Assessment Outcomes

For each Essential Service:

- Measure Performance (Score)
- Identify Strengths & Weaknesses
- Brainstorm Improvement Strategies

Assessment Results

- Scores
- Notes & Themes
 - Strengths & weaknesses
- Report
 - Describes the assessment process
 - Integrates scores and themes
 - Highlights next steps

Laboratory System Improvement Program Rating Categories

9	1	2	3	4
No Activity	Minimal Activity	Moderate Activity	Significant Activity	Optimal Activity

No Activity	0% or absolutely no activity.
Minimal Activity	Greater than zero, but no more than 25% of the activity described within the question is met within the public health system
Moderate Activity	Greater than 25%, but no more than 50% of the activity described within the question is met within the public health system
Significant Activity	Greater than 50%, but no more than 75% of the activity described within the question is met within the public health system
Optimal Activity	Greater than 75% of the activity described within the question is met within the public health system

PERFORMANCE
Essential Public
Health Services

	1	2	3	4	5	6	7	8	9	10
Optimal Activity	83.4	89.0								
Significant Activity			67.0				67.0	61.2		
Moderate Activity				33.0	30.3	44.3			50.0	
Minimal Activity										16.7
No Activity										

Milwaukee LSIP Results

Ranking of Essential Services

Optimal

1. Monitor health status to identify community health problems
2. Diagnose and investigate health problems and health hazards in the community

Significant

3. Inform, educate, and empower people about health issues
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health and personal health care workforce

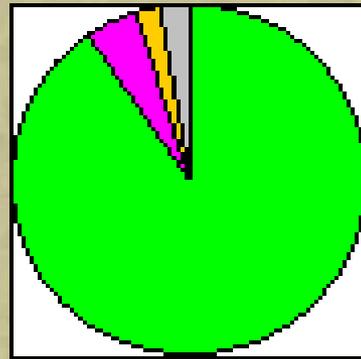
Moderate

4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services

Minimal

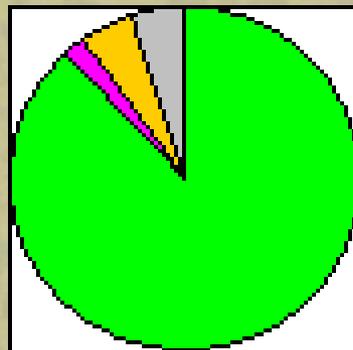
10. Research for new insights and innovative solutions to health problems

Would you participate in this process again?



- Yes, 90.4%
- No, 4.8%
- Maybe/Other, 2.4%
- No Response, 2.4%

Do you see this as a helpful tool and process?



- Yes, 88%
- No, 2.4%
- Maybe/Other, 4.8%
- No Response, 4.8%

Discussion Questions

Reflect on these points as we review the results

- What aspect of the assessment caught your attention?
- Were there any surprises?
- What themes emerged?
- What issues is the LPHL system best able to address?
- What issues are the most important to address from a public health perspective?
- Are there initiatives being planned or implemented that can be leveraged as we work to improve the LPHL system?
- Which one of these system priorities would you be interested in or excited about working on?

Optimal Activity

Greater than 75% of the activity described within the question is met within the public health system

- **ES #1:** Monitor Health Status to Identify Community Health Problems
- **ES #2:** Diagnose and Investigate Health Problems and Health Hazards in the Community



Essential Service #1: Monitor Health Status to Identify Community Health Problems

Aggregate score of 83.4% (optimal)

INDICATORS

1.1 Surveillance Information Systems	100.0
1.2 Monitoring Health Status	66.8

Essential Service #1: Monitor Health Status to Identify Community Health Problems

- **Strengths**

- Ability to identify sentinel health events, participation in surveillance systems and collaboration with system partners
- Detection of infectious disease, well developed water testing programs and a responsive information management system

- **Next Steps**

- Conduct a gap analysis of surveillance systems
- Translate data into practice to improve the health of underserved populations
- Increase the involvement of environmental health partners



Essential Service #2

Diagnose and Investigate Health Problems and Health Hazards in the Community

Aggregate score of 89% (optimal)

INDICATORS

2.1 State of the Art Testing	100.0
2.2 Collaboration & Networks	100.0
2.3 Continuity of Operations	67.0

Essential Service #2

Diagnose and Investigate Health Problems and Health Hazards in the Community

- **Strengths**

- MHD surge capacity and LPHL system expertise
- MHD laboratory classification as an LRN
- LPHL system emergency response capacity

- **Next Steps**

- Assure adequate funding for lab facilities and workforce capacity
- Assure quality control among CLIA waived laboratories
- Develop emergency plans and drills for public and private sector laboratories
- Develop a backup information sharing plan for laboratories

Significant Activity

Greater than 50% but no more than 75% of the activity described within the question is met within the public health system

- **ES #3:** Inform, Educate and Empower about Health Issues
- **ES #7:** Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable
- **ES #8:** Assure a Competent Public Health and Personal Health Care Workforce

Essential Service #3

Inform, Educate, and Empower People about Health Issues

Aggregate score of 67% (significant)

INDICATORS

3.1 Outreach & Communication	67.0
3.2 Public Information	67.0
3.3 Education	67.0

Essential Service #3

Inform, Educate, and Empower People about Health Issues

- **Strengths**

- MHD lab *e*lab report and communication
- Information sharing among clinical lab partners

- **Next Steps**

- Enumerate LPHL system partners and operations
- Assess communication mechanisms and effectiveness within the LPHL system
- Translate information for non-clinical partners and the community

Essential Service #7

Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable

Aggregate score of 67% (significant)

INDICATOR

7.1 Availability of Lab Services	67.0
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Essential Service #7

Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable

- **Strengths**

- Collaboration between public and private sector
- Availability of resources

- **Next Steps**

- Conduct a gap analysis of private health care and related laboratory services
- Strengthen linkages with CBOs that serve hard to reach populations

Essential Service #8 Assure a Competent Public Health and Personal Health Care Workforce

Aggregate score of 61.2% (significant)

INDICATORS

8.1 Workforce Competencies	83.5
8.2 Staff Development	67.0
8.3 Assuring Workforce	33.0

Essential Service #8

Assure a Competent Public Health and Personal Health Care Workforce

- **Strengths**

- Compliance with accreditation requirements
- Internship opportunities for students

- **Next Steps**

- Assure training and support for lab administrators and managers
- Assure adequate time and resources for lab staff development
- Strengthen the role of academic partners in LPHL workforce development

Moderate Activity

Greater than 25% but no more than 50% of the activity described within the question is met within the public health systems

- **ES #4:** Mobilize Partnerships to Identify and Solve Health Problems
- **ES #5:** Develop Policies and Plans that Support Individual and Community Health Efforts
- **ES #6:** Enforce Laws and Regulations that Protect Health and Ensure Safety
- **ES #9:** Evaluate Effectiveness, Accessibility and Availability of Personal and Population-Based Services



Essential Service #4

Mobilize Community Partnerships to Identify and Solve Health Problems

Aggregate score of 33% (moderate)

INDICATORS

4.1 Constituency Development	33.0
4.2 Communication	33.0
4.3 Resources	33.0

Essential Service #4

Mobilize Community Partnerships to Identify and Solve Health Problems

- **Strengths**

- Relationships among LPHL system partners
- *e*lab network and its communication efforts
- Communication during emergency situations

- **Next Steps**

- Strengthen collaboration among private sector and CBO partners
- Assess LPHL communication structure
- Identify model lab communication systems
- Find ways to share and advocate for additional resources



Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

- **Aggregate score of 30.3% (moderate)**

INDICATORS

5.1 Role in Policy Making	50.0
5.2 Partnership in Planning	36.0
5.3 Dissemination & Evaluation	5.0

Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

- **Strengths**

- Collaboration during emergency situations and on a day-to-day basis among public health, the community and laboratories
- Ability to disseminate information to system stakeholders

- **Next Steps**

- Increase the support of WI DHS & WSLH for local public health and clinical laboratories
- Refine MHD lab communications with various target audiences
- Involve laboratorians in broad public health initiatives



Essential Service #6

Enforce Laws and Regulations that Protect Health and Ensure Safety

Aggregate score of 44.3% (moderate)

INDICATORS

6.1 Revision of Laws & Regulations	5.0
6.2 Encourage Compliance	83.5

Essential Service #6

Enforce Laws and Regulations that Protect Health and Ensure Safety

- **Strengths**

- Ability to respond to pending legislation
- Involvement in food safety issues
- Agency (Agriculture & DNR) compliance

- **Next Steps**

- Develop a forum for LPHL system involvement in legislative efforts
- Address compliance among CLIA waived labs

Essential Service #9

Evaluate Effectiveness, Accessibility, and Availability of Personal and Population-Based Services

Aggregate score of 50% (moderate)

INDICATORS

9.1 System Mission & Purpose	67.0
9.2 System Effectiveness	50.0
9.3 System Collaboration	33.0

Essential Service #9

Evaluate Effectiveness, Accessibility, and Availability of Personal and Population-Based Services

- **Strengths**

- Emerging testing technology
- Collaboration among LPHL system partners

- **Next Steps**

- Better define the LPHL system and its partners
- Assess technological capacities within the LPHL system
- Identify a LPHL system leader
- Measure LPHL system collaboration

Minimal Activity

Greater than zero but no more than 25% of the activity described within the question is met within the public health system

- **ES #10:** Research for Insights and Innovative Solutions to Health Problems



Essential Service #10

Research for Insights and Innovative Solutions to Health Problems

Aggregate score of 16.7% (minimal)

INDICATORS

10.1 Planning & Financing	19.0
10.2 Implementation & Dissemination	14.3

Essential Service #10

Research for Insights and Innovative Solutions to Health Problems

- **Strengths**

- Relationships between MHD lab and academic institutions
- Research capacity among academic institutions

- **Next Steps**

- Form a research committee to facilitate collaboration and resource sharing
- Strengthen grant writing partnerships
- Increase political awareness and advocacy for research
- Establish a lab oriented research clearinghouse

Assessment Analysis Optimal Activity

KEY IDEA 1.1.1: identifies sentinel health events and trends

KEY IDEA 1.1.2: participates in state and national surveillance

KEY IDEA 1.1.3: collaborate to strengthen surveillance systems

KEY IDEA 1.2.2: identifies and detects infectious diseases and contributes to surveillance systems

KEY IDEA 2.1.1: assures the diagnosis and investigation of health problems and hazards of public health significance

KEY IDEA 2.2.1: actively involved in networks that collaborate in the epidemiological investigation of and response to disasters

KEY IDEA 6.2.2: comply with all applicable laws and regulations

KEY IDEA 8.1.1: identify position requirements for workforce categories

Assessment Analysis Significant Activity

- KEY IDEA 1.2.1: system to gather data to support evaluating community environmental health
- KEY IDEA 1.2.5: integrated information management system
- KEY IDEA 2.3.1: capacity, authority, and other preparations to assure rapid response to public health emergencies
- KEY IDEA 3.1.1: system of outreach and communication to inform about health issues associated with lab services
- KEY IDEA 3.2.1: creates and delivers targeted laboratory information to appropriate health partners
- KEY IDEA 3.2.2: delivers targeted lab information to appropriate non-health partners and the public
- KEY IDEA 3.3.1: education and relationships empower community partners
- KEY IDEA 5.1.1: system partners contribute their expertise and resources to inform and influence policy

Assessment Analysis Significant Activity (cont.)

KEY IDEA 5.2.1: obtains input to develop or modify policies or plans

KEY IDEA 6.2.1: promotes compliance by all labs in the system

KEY IDEA 7.1.1: identifies laboratory service needs and collaborates to fill gaps

KEY IDEA 8.1.2: tools to assess competency of the laboratory workforce

KEY IDEA 8.2.1: identify staff development needs

KEY IDEA 8.2.2: promote the availability of resources for staff development

KEY IDEA 9.1.1: system services, as related to its mission and purpose, are evaluated

KEY IDEA 9.1.2: process in place for periodic review and evaluation of the test menus and technologies

KEY IDEA 9.2.1: accessibility and effectiveness of personal and population based lab services is regularly determined

Assessment Analysis

Moderate Activity

KEY IDEA 1.2.4: generates reliable information about chronic diseases of public health significance

KEY IDEA 4.1.1: develops and maintains positive relationships

KEY IDEA 4.2.1: communication plan is fully integrated with partners' and collaborators' communication plans

KEY IDEA 4.2.2: communicates effectively in a regular, timely, and accurate way to support collaboration

KEY IDEA 4.3.1: system partners work together to share existing resources and/or to identify new resources

KEY IDEA 5.1.2: policies and plans are informed by science and data

Assessment Analysis Moderate Activity (cont.)

KEY IDEA 8.3.1: maintains an environment that attracts and retains exceptional staff

KEY IDEA 8.3.2: system addresses workforce shortage issues

KEY IDEA 9.2.2: quality of laboratory services throughout the community is regularly determined

KEY IDEA 9.3.1: level and utility of collaboration among system members is measured and the results are shared

KEY IDEA 10.1.1: has adequate capacity to plan research and innovation activities

KEY IDEA 10.2.3: disseminates research outcomes, best practices, and recognition

Assessment Analysis Minimal Activity

- KEY IDEA 5.2.2: issues are represented in local and state-level plans and policies
- KEY IDEA 5.3.1: policies and plans are widely disseminated to inform stakeholders and public
- KEY IDEA 5.3.2: plans and policies are evaluated and updated
- KEY IDEA 6.1.1: recommends revisions of federal and state laws related to lab practice
- KEY IDEA 10.1.2: collaborates to finance research
- KEY IDEA 10.2.1: lab system research draws from diverse perspectives and expertise to stimulate innovative thinking
- KEY IDEA 10.2.2: research is evaluated to foster improvement and innovation

Discussion Questions

- What aspect of the assessment caught your attention?
- Were there any surprises?
- What themes emerged?
- What issues is the LPHL system best able to address?
- What issues are the most important to address from a public health perspective?
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Next Steps

APHL Innovations in Quality Public Health Laboratory Practice Grant

- Webinars
 - Assessment Results
 - Strategic Plan
- Milwaukee Laboratory Advisory Committee
 - Identify System Improvement Efforts
 - Form Subcommittees around System Priorities
- Poster Presentation at APHL National Meeting
- Publish Manuscript

Questions?

Comments?

Suggestions?

Report – Evaluation – Assessment:

<http://city.milwaukee.gov/LSIP>